behind, obliquely sulcate on each side before the base, the hind angles obtuse ; closely, rather coarsely punctate, usually with an indication of a smooth median line. Elytra moderately long, oval, at the base a little wider than the prothorax, separately rounded at the apex, leaving the tip of the last dorsal segment exposed, the humeri obtuse; coarsely striato-punctate, and with some additional punctures on either side of the suture at the base, the interstices flat, smooth. Beneath closely, finely punctate. Penis-sheath of of long, parallel-sided, abruptly acuminate in the middle at tip.

Length $5-5 \frac{2}{3}$, breadth $1 \frac{4}{5}-2 \mathrm{~mm}$. ( ( o $_{\text {q }}$ ).
Hab. Falkland Is. (H. N. Sulivan).
Numerous specimens, received by the British Museum in July 1915. Dr. M. (ameron, R.N., collected a few Coleoptera in these islands in Dec. 1914, but he did not meet with P. falklandica.
XXXVII.-Rhynchotal Notes.-LIX. By W. L. Distant.

## Homoptera.

Fam. Membracidæ (continued from p. 159).
Xiphistes crassus, sp.n.
Body and legs pale brownish testaceous; tegmina hyaline, the veins pale brownish, about basal two-thirds reflecting the dark abdomen beneath; pronotum with the anterior lateral angles very short, broad, robust, three-sided, slightly directed upwardly and forwardly, their apices broadly, obtusely angulate, moderately centrally, longitudinally carinate, the posterior process tricarinate, its apex a little passing the posterior angle of the inner tegminal margin, posterior margin of the frontal area above face distinctly concave, tibiæ compressed and moderately dilated.

Long. 7 mm . ; exp. pronot. lat. process. $3 \frac{1}{2} \mathrm{~mm}$.
Hab. Mashonaland, Salisbury (G. A. K. Marshall).
The salient characters of this species are its elongate form and the short, broad, obtuse, anterior lateral angles of the pronotum.

## Basilides bipennis.

Centrotus bipennis, Walk. List. Hom. ii. p. 606 (1851).
Anchon albolineatum, Buckt. Mon. Membrac. p. 216, pl. xlviii. figs. $6 a, b$ (1903).

Anchon fuscum, Buckt. Tr. Linn. Soc. Lond. (2) ix. p. 334, pl. xxii. fig. 2 a (1906).
Monocentrus albolineatum, Schmidt, Zool. Anz. xxxriii. p. 238 (1911).
Basilides lipennis, Dist. Ann. \& Mag. Nat. Hist. (8) xvii. p. 149 (1916).
Hab. W. Africa.
Since placing this species in my genus Basilides I have found that Buckton's Anchon albolineatum is also a synonym, and must fall accordingly.

As regards the genus, Schmidt (supra) inclines to the view (judging from the figure) that Buckton's species is to be included in Monocentrus, Melich. (Wien. ent. Zeit xxiv. p. 297, 1905). I have not seen a typical specimen of Monocentrus. Melichar placed his genus after Anchon, but if Schmidt is right in his determination, then the structure of the pronotum with its anterior processes should ally it to Leptobclus, Stål.

## Centrochares borneensis, sp. n.

Head, pronotum, and body beneath brownish testaceous; legs testaceous; tegmina ochraceous, base and costal margin brownish testaceous; pronotum punctate, sparsely finely tuberculate, lateral processes obliquely erect, their apices broadened, flattened, slightly recurved; anteriorly convexly rounded, posteriorly truncate, with the apical angle subacute, centrally longitudinally carinate, posterior process undulate, shortly spinous above, distinctly raised and gibbous above scutellum, but deflected to apex of same, and from thence conterminous with tegmina, a strong trilobed erection about two-thirds from base, the apex robust and about reaching tegminal apex ; anterior tibiæ moderately dilated.

Long., incl. tegm., $4 \frac{1}{2} \mathrm{~mm}$. ; exp. pronot. lat. process. 4 mm .

Hab. Borneo ; Kuching (R. Shelford).

## Centrochares posticus.

Pterygia postica, Buckt. Mon. Membrac. p. 70, pl. xi. fig. $5 a^{\circ}(1901)$.
Hab. Philippine Islands.
Centrochares bucktoni, sp. in.
Pterygia postica, n. s., ㅇ?, Buckt. Mon. Membrac. p. 70 , pl. xi. fig. 4 a (1901).

Hab. Philippine Islands.

## Leptocentrus aureomaculatus, sp. n .

Head, pronotum, and scutellum shining black ; head and sternum darkly greyishly pilose; femora black, tibiæ and tarsi paler and more castaneous; tegmina subhyaline, pale brownish ochraceous, the veins darker, a large bright ochraceous spot at base; pronotum thickly punctate, the posterior process somewhat slender, tricarinate, impinging on inner tegminal margin at posterior angle and extending beyond it, the anterior lateral processes slender and directed backwardly.

Long. $7-7 \frac{1}{2} \mathrm{~mm}$. ; exp. pronot. lat. process. 5 mm .
Hab. Uganda Prot., Valley of Kafu R., Unyoro, 3400 ft ., Kampala Rd., 3500 ft ., Ankole-Toro Border (S. A. Neave).

Allied to L. altifrons, Walk., but with the lateral pronotal processes more slender, less curved, and more straightly directed backward, pronotum more elevated at base, \&c. The large bright ochraceous basal tegminal spot is also indicative.

## Leptocentrus grossus, sp. n.

Head, pronotum, scutelhm, sternum beneath, and legs dark castaneous; tegnina pale bronzy brown, extreme base castaneons, immediately followed by an obscure, pale ochraceous, transverse, macular fascia, veins castaneous; pronotum thickly punctate, strongly centrally, longitudinally carinate, the anterior lateral processes robust, centrally longitudinally carinate, their posterior apices slightly recurved, posterior process tricarinate, its apex passing the posterior angle of inner tegminal margin; legs palely castaneous, somewhat thickly greyishly pilose.

Long. 9-10 mm. ; exp. lat. pronot. process. $5 \frac{1}{2}-6 \mathrm{~mm}$.
Hab. Uganda; Entebbe (C. A. Wiggins and C. C. Gowdey). Eutebbe Forest, 3800 ft., and Buamba Forest, Semliki Valley, 2300-2800 ft. (S. A. Neave).

In size allied to L. limbipennis, Jacobi, from Ruwenzori, but with the posterior pronotal process much more slender and less undulate, \&c.

## Centrotypus shelfordi, sp. n .

Head and pronotum black with a dark bluish reflection; body beneath and legs fuscous brown, tarsi brownish ochraceous; tegmina slining castaneous, the costal margin blackish ; pronotum thickly punctate, the lateral processes broad, laminate, obliquely upwardly directed, their apices broadly truncate, anteriorly rounded and posteriorly sliortly
subacute, apical areas wrinkled, and behind middle strongly transversely carinate, the disk somewhat obsoletely centrally carinate, the posterior process strongly tricarinate, its apex slightly passing the posterior angle of the inner tegminal margin.

Long. $6 \frac{1}{2} \mathrm{~mm}$. : exp. pronnt. lat. process. 6 mm .
Hab. Borneo; Sarawak (R. Shelford).
A small well-marked species, the expanse of its broad lateral pronotal processes almost equalling its longitude including tegmina.

Centrotypus taurus, sp. n.
Pronotum bluish black, apical areas of the lateral processes purplish black; face and body beneath thickly, longly, ochraceously pilose; legs castaneous brown, the tarsi more ochraceous; tegmina very pale ochraceous, the apical area castancous, the costal margin blackish; pronotum thickly coarsely punctate, the lateral processes broad, transverse, slightly recurved, their apical areas laminate, almost impunctate, wrinkled, their apices anteriorly broadly, obliquely rounded, posteriorly shortly subacute, the disk obsoletely centrally carinate, the posterior process strongly tricarinate, its a pex subacute and passing the posterior angle of the inner tegminal margin.

Long., incl. tegm, $8 \frac{1}{2} \mathrm{~mm}$. ; exp. lat. pronot. process. 7 mm .

Hab. Siamese Malay States (Annandale and Robinson).

## Centrotypus siamensis, sp. n.

Head and pronotum bluish black; body beneath and legs dull black; tegmina pale ochraceous, subhyaline, the apical area pale castaneous, the costal area broadly black; pronotum thickly punctate, the lateral processes moderately broad and long, transverse, their apices very slightly recurved, their apical areas very distinctly obliquely impressed, posteriorly transversely carinate, their apices anteriorly rounded, posteriorly broadly subacute, the disk faintly carinate, the posterior process strongly tricarinate, its apex subacute and about reaching the posterior angle of the inner tegminal margin.

Long., incl. tegm:, 8 mm . ; exp. lat. pronot. process. 5 mm . Hab. Siamese Malay States, Bulsit Besar (Annandale and Robinson).

Allied to C. latimargo, Walk., and C. pactolus, Buckt.

Centrotypus latimargo.
Centrotus latimargo, Walk. Journ. Linn. Soc. Lond., Zool. i. p. 163 (1857).

Hab. Borneo.
Centrotypus pactolus.
Otinotus pactolus, Buckt. Monogr. Membrac. p. 233, pl. lii. fig. 7 a (1903).

Hab. Perak.

## Centrotypus tauriformis, sp. n.

Pronotum dark bluish black; face and body beneath thickly greyishly pilose; legs fuscous brown ; tegmina pale ochraceous, apical third castaneous, costal area black ; pronotum thickly, somewhat coarsely punctate, lateral processes strongly recurved, somewhat slender, excluding bases almost impunctate, convexly narrowing to apices, which are subacute, behind middle strongly transversely carinate, the carination not reaching apex, disk obsoletely centrally carinate, posterior process strongly tricarinate, its apex narrowed and subacute and passing the posterior angle of the inner tegminal margin.

Long., incl. tegm., 9 mm .; exp. lat. pronot. process. 7 mm .
Hab. Java (ex. Buckton Coll.).
A species to be recognized by the somewhat slender, strongly recurved, lateral pronotal processes.

## Centrotypus pronotalis, sp. n.

Pronotum bluish black; face and sternum greyishly pilose; abdomen beneath and legs testaceous; tegmina shining ochraceous, the costal and apical areas a little darker and more purplish ; pronotum thickly coarsely punctate, the lateral processes gradually uarrowing and strongly recurved, their apices subacute, behind middle transversely carinate, the disk faintly carinate, the posterior process strongly tricarinate, its apex almost reaching the tegminal apex.

Long., incl. tegm., 9 mm . ; exp. lat. pronot. process. $8 \frac{1}{2} \mathrm{~mm}$.
Hab. Java (A. R. Wullace).
Allied to the preceding species, C. tauriformis, but with the lateral pronotal processes longer and more crescented ; colour of tegmina quite dissimilar, \&c.

Centrotypus perakensis, n. nom.
Centrotypus alutus, Buckt. Mongr. Membrac. p. 237, pl. liv. fig. $2 a$ (1903).

Hab. Perak (Doherty).
The Centrotypus alutus, Fairm., is well figured, but the locality given (Brazil) is evidently incorrect. The British Mnseum possesses a typical example. The Centrotypus alatus, Buckt., was described from a specimen in my own collection and now contained in the British Museum. This, therefore, required a new name.

Centrotypus aduncus.
Leptocentrus aduncus, Buckt. Monogr. Membrac. p. 236, pl. liii. fig. 6 (1903).

Hab. Philippine Islands; Luzon.

## Centrotypus longicornis.

Centrotus longicornis, Vuillef. Ann. Soc. Ent. Fr. (4) iv. p. 142, pl. i. fig. 8 a (1864).
Centrotypus longicorruis, Griffini, Soc. Ital. Scien. Nat. liv. p. 7, fig. (1915).

Hab. Borneo ; Sarawak (J. E. A. Lewis).
The British Museum now possesses a single (somewhat damaged) specimen of this very rave Membracid, the original type of which has been recently minutely and excellently redescribed by Dr. Achille Griffiui.

> Lestarches, gen. nov.

Allied to Centrotypus, Stål, but differing principally by the structure of the posterior pronotal process, which is broad, very distinctly carinate, distinctly moderately convex beyond scutellum, its apex subacute and distinctly deflected over the posterior angle of the inner tegminal margin; disk and front of pronotum strongly centrally longitudinally carinate.

Type, L. forticornis, Walk.
Lestarches forticornis.
Centrotus forticornis, Walk. Journ. Linn. Soc. Lond., Zool. vol. x. p. 185 (1868).

Hab. Celebes.

Emphusis agnatus, sp. n.
Head, pronotum, body beneath, and legs dark purplish brown; tegmina pale shining ochraceous, extreme base and costal area dark purplish brown, apical area more or less tinged with castaneous ; pronotum very coarsely punctate, finely, centrally, loigitudinally carinate, posterior process tricarinate, only slightly elevated above scntellnm, and then continnously impinging on inner margin of tcgmina to a little before tegminal apex, disk of pronotum crescented in form, the lateral processes broad and prominently directed backwardly, in a line with the lateral pronotal margins.

Long. 10 mm .; exp. lat pronot. process. 6 mm .
Hub. Siam ; Chantaboun (M. H. Mouhot).

## Dacaratha, gen. nov.

Allied to Emphusis, Buckt., but pronotum less regularly crescented in form, its frontal area shorter and strongly centrally carinate, the posterior process undulate and distinctly elevated above scutellum, the apical area upwardly directed beyond the posterior angle of the tegminal inner margin, the anterior lateral processes much more angulately and less crescently produced.

Type, D. myasana, 1)ist.
Emplusis appears to be confined to the Oriental and Malayan regions; Dacaratha at present is only known from Central Africa.

## Dacaratha nyasana, sp. n.

Head, pronotum, and scutellum black ; body beneath and femora black, tibiæ and tarsi dark castaneous; anterior and lateral areas of sternum greyishly pubescent; tegmina subhyaline, wrinkled, base black, outwardly obscurely margined with dull ochraceous, apical area more or less bright testaceous; pronotum thickly, finely punctate, centrally longitudinally carinate, the posterior process tricarinate, convexly raised above scutellum and then impinging on the posterior angle of the inner tegminal margin, and beyond this it straightly continues for a short distance, the lateral pronotal processes short, moderately obliquely angularly directed backwardly.

Long., incl. tegm., 8 mm .; exp. lat. pronot. process. 4 mm .
Hab. Near Lake Nyasa (H. B. Cotterill).

## Periaman wallacei, sp. n.

Pronotum and legs black; an arcuate linear spot beneath the lateral pronotal processes, a large spot on each side of base of posterior process and apices of anterior femora ochraceous ; face and body beneath thickly greyishly pilose ; tegmina pale bronzy subhyaline, base and costal marginal area-extending to apex-black; pronotum coarsely punctate, the disk strongly centrally carinate, the lateral processes moderately well produced, slightly recurved, centrally carinate, the anterior and posterior margins broadly sublaminate, their apices subacute; posterior process robust, strongly tricarinate, moderately laterally compressed, beyond middle strongly narrowed to apex, which is subacute, and reaching the posterior angle of the inner tegminal margin ; femora moderately thickened; face concavely emarginate before clypeus.

Long., incl. tegm., $8 \frac{1}{2}-9 \frac{1}{2} \mathrm{~mm}$. ; exp. lat. pronot. process. 5 mm .*

Hab. Borneo ; Sarawak (A. R. Wallace, Brit. Mus.).

## Otinotoides, gen. nov.

Allied to Otinotus, Buckt., from which it principally differs by the posterior pronotal process, which is more robust, especially at base, where it has a distinct medial carination on each side; it touches the scutellum and then is distinctly moderately convexly elevated, its apical half roundly deflected, its apex slender, subacute, and almost reaching the tegminal apex.

Type, O. pallipes, Walk.

## Otinotoides pallipes.

Centrotus pallipes, Walk. Journ. Linn. Soc. Lond., Zool. x. p. 185 (1868).

Otinotus pallipes, Buckt. Monogr. Membrac. p. 232, pl. lii. figs. 4, $4 a$ (1903) ; Dist. Trans. Zool. Soc. Lond. xx. p. 356 (1914).

Centrotus tibialis, Walk. Journ. Linn. Soc. Lond., Zool. x. p. 188 (1868).
Centrotus ramivitta, Walk. MS.?
Centrotus semiclusus, Walk. MS.?
Hab. New Guinea, Batchian, Mysol.

## Otinotoides semilucidus.

Centrotus semilucidus, Walk. Journ. Linn. Soc. Lond., Zool. x. p. 186 (1868).

* In smaller specimen and type; in a second larger specimen these processes are mutilated.

Centrotypus tibialis, Buckt. Monogr. Membrac. p. 238, pl. liv. fig. 3 a (1903).

Hab. Waigiou (A. R. Wallace).

## Otinotoides albidus.

Centrotus albidus, Walk. Jouru. Linn. Soc. Lond., Zool. x. p. 188 (1868).

Hab. Mysol (A. R. Wallace).

## Otinotoides brevivittus.

Centrotus brevivitta, Walk. Journ. Linn. Soc. Lond., Zool. x. p. 185 (1868).

Hab. New Guinea (A. R. Wallace).

## Otinotoides strigatus.

Centrotus strigatus, Walk. Journ. Linn. Soc. Lond., Zool. x. p. 184 (1868).

Ophicentrus curvicornis, Buckt. Monogr. Membrac. p. 250, pl. 1vii. fig. 3 a (1903).
Eufienchia strigata, Dist. Ann. \& Mag. Nat. Hist. ante, p. 153.
Hab. New Guinea.
I had previously included this species in the Australian genus Eufrenchia, to which it had considerable affinity. Having now founded the genus Otinotoides for a number of Papuan species, it finds a natural position within it.

## Gondopharnes, gen. nov.

Pronotum not prominently raised, the lateral processes moderately robust, their apices more or less recurved and subacute, centrally longitudinally carinate, posterior process broad, laterally compressed, tricarinate, sinuous, at base almost touching the scutellum and then impinging on the tegmina, its apex longly narrowed and acute, convexly deflected, and reaching the tegminal apex; tegmina with three large apical cells.

Type, G. piceus, Walk.
A genus to be placed near Otinoides, Dist.

## Gondopharnes piceus.

Centrotus piceus, Walk. Journ. Linn. Soc. Lond., Zool. x. p. 187 (1868).
Hab. Batchian (A. R. Wallace).

## Genus Tricoceps.

Tricoceps, Buckt. Monogr. Membrac. p. 249 (190\%).
Tambusa, Dist. Insect. Transvaal. p. 216 (1908), nom. præoce.
Tambusana, Dist. Ann. \& Mag. Nat. Hist. (8) ix. p. 652 (1912), n. nom.
Type, T. brunnipennis, Germ.
I did not recognize Buckton's genus at the time, as his figure of the typical species is defective, and he gave no reference as to its origin ; he also placed it in juxtaposition to a genus with which it had no affinity.

## Tricoceps brumipennis.

Centrotus brunnipennis, Germ. Rev. Silb. iii. p. 257. 4 (1835) : Fairm. Ann. Soc. Ent. Fr. ser. 2, iv. p. 512 (184i).
Tricoceps brunneipemis, Buckt. Monogr. Membrac. p. 249 (1903).
Hab. S. Africa.
Buckton gave a different spelling to the specific name and no reference to its author.

## Tricoceps bubipennis.

Centrohus bubipennis, Fairm. Ann. Soc. Ent. Fr. ser. 2, iv. p. 511 (1846); Stål, Hem. Afr. iv, p. 95 (1866).
Tambusa bubipennis, Dist. Insect. Transvaal. p. 216, tab. xxi. fig. I7 (1908).

Hab. S. Africa.

## Tricoceps curvispina, sp. n.

Body and legs black; tegmina bronzy brown, base and a costal line black, a large spot at posterior angle of inner tegminal margin castaneous ; pronotum thickly punctate, anterior lateral processes recurved, somewhat long, their apices subacute, the disk strongly centrally carinate, the posterior process tricarinate, strongly raised at base and then straightly obliquely continued to posterior angle of inmer tegminal margin, which it distinctly passes, its apex subacute ; scutellum with its apex prominently upwardly recurved.

Long., incl. tegm., 5-6 mm.; exp. lat. pronot. process. $3 \frac{1}{2}-4 \mathrm{~mm}$.

Hab. Congo Free State; Katanga, Kambove, 40005000 ft . (S. A. Neave).

Allied to T. brumipemnis, Germ., but with the lateral pronotal processes longer, much more recurved, and considerably more acute.

## Centrotus bovinus, sp. n.

Head, pronotum, scutellum, body beneath, and legs black, a white spot at each basal angle of the scutellum ; sternum largely whitely tomentose; tegmina sublyyaline, wrinkled, the veins castaneous, the base black, the apical area pale bronzy brown ; pronotum wrinkled and punctate, centrally longitudinally carinate, the anterior lateral processes somewhat slender, centrally carinate, and distinctly recurved, their apices subacute, posterior process tricarinate, very slightly elevated above scutellum and from thence recurved and impinging on tegmina, its apex passing the posterior angle of the inner tegminal margin.

Long., iucl. tegm., $7-7 \frac{1}{2} \mathrm{~mm}$. ; exp. lat. pronot. process. $4 \frac{1}{2}-5 \mathrm{~mm}$.

Hab. Uganda; Kadunguru, East. Province (C. C. Gowdey). Brit. E. Africa; Mumias Distr. (A. D. Milne).

Allied to C. bantuantus, Dist., but is to be separated from that species by the strongly recurved lateral pronotal processes, \&c.

## Centrotus shoanus, sp. n.

Pronotum, body beneath, and femora dark ferruginous brown; tibiæ and tarsi testaceous; lateral areas of sternum strongly ochraceously tomentose ; tegmina subhyaline, strongly wrinkled, venation dull ochraccous, extreme base ferruginous brown; pronotum thickly punctate, the lateral processes moderately short and robust, transverse, their apices obsoletely acute, the disk rather finely centrally carinate, posterior process finely tricarinate, distinctly separate from scutellum, apical area narrowed, the apex subacute and reaching the posterior angle of inner tegmiual margin ; scutellum with a small spot at each basal angle and the lateral margins ochraceous.

Long., incl. tegm., 8 mm . ; exp. lat. pronot. process. 4 mm .
Hab. Abyssinia ; Shoa. Collected on the mission of Sir W. C. Harris to Shoa.

## Centrotus matangensis, sp. n.

Head, pronotum, and scutellum black; scutellum with a dark (sometimes pale) ochraceous spot in each basal angle ; pronotal front, face, and legs dark purplish; lateral areas of sternum and abdomen beneath palely ochraceously tomentose; tegmina purplish brown; pronotum punctate and coarsely granulate, centrally longitudinally carinate,
the anterior lateral processes robust, broad, directed outwardly and a little upwardly, their apices subtruncate; posterior pronotal process tricarinate, impinging ou tegmina immediately beyond scutellum, gradually narrowing to apex, which is subacute, and passing posterior angle of inner tegminal margin.

Long. $8 \frac{1}{2} \mathrm{~mm}$.; exp. lat. pronot. process. 5 mm . Hab. Borneo; Mt. Matang (R. Shelford).

## Centrotus albilatus.

Centrotus albilutus, Walk. Journ. Linn. Soc. Lond., Zool. x. p. 184 (1868).

Hab. New Guinea.

## Genus Tshafa.

Tshaka, Dist. Insect. Transraal. pt. ix. p. 214 (1903).

## Tshaka undulatus, sp. n.

Head, pronotum, scutellum, and body beneath black; legs more or less castaneous, the tarsi ochraceous; tegmina flavescent, the veins darker, especially on the apical area, base and a small costal spot beyond middle black, a small castaneous spot at posterior angle of the inner tegminal margin ; pronotum strongly, centrally, longitudinally carinate, the posterior process tricarinate, undulate, impinging on tegmina before the posterior angle of the inner tegminal margin, and then recurved and ruming almost parallel with it to beyond the posterior angle, the apex subacute; lateral pronotal processes robust, their apices slightly recurved and subacute; scutellum abont as broad as long, its apex bispinous.

Long. 5 mm .; exp. pronot. process. 4 mm .
Hab. Mashonaland; Salisbury (G. A. K. Marshall).
Allied to T. naturalis, Dist., from the Transvaal, but with the posterior pronotal process shorter, more robust, more convexly archicd over the scutellum, and the apical area more recurved; tegmina shorter and proportionally broader.

## Platybelus escaleranus, sp. n.

Head, pronotum, scutellum, body beneath, and legs blackish brown; a pale spot at each basal angle of the scutellum ; tegmina subhyaline, apical margin ochraceous,
basal area and two transverse fascie (one near middle broad and straight, the other narrower and curred before apex) purplish brown; pronotum thickly punctate, strongly centrally, longitudinally carinate, the lateral processes recurved, gradually narrowing to apices, which are acute, posterior process above fiucly serrate, rolustly raised at base, and downardly consexly curved ahove scutellum and to a little beyond its apex, and then again recurved to apex, which extends beyond the posterior process of imer tegminal margin.

Long. 7 mm. ; exp. lat. pronot. process. 4 mm.
Hab. Cameroons (Escalera, Brit. Mus.).
Allied to $P$. Aures, Sigin., but with the posterior pronotal process more shader and with its basal angle more pronounced; lateral pronotal processes also more slender and their apices distinetly and regularly acnte.

## Platybelus yourdeyi, sp. n.

Allied to the preceding species $P$ '. esculeranus, but with the lateral pronotal probesses considerably more slender and a little more directed backwardly ; tegmina ochraceous, with the basal and costal areas black; base of posterior pronotal process more obliquely raised.

Long. 7 mm . ; exp. lat. pronot. process. 4 mm.
Hab. Uganda; Mabira forest (C. C. Goudey).

## Platybelus africanus, sp. 11.

Head, promotnm, body bencath, and legs black or blackish brown; disk of pronotum with a slender waved greyish line on each lateral area and a similarly coloured smatl linear spot at each basal angle of the scutellum ; tegmina dark ochraceons, base and a spot at posterior angle of inner tegminal margin castaneons, a very obscure pale transverse macular fascia beyond middle; pronotum thekly punctate, the lateral processes as in the two preceding species, but with their apices less regularly convexly recurved ; the posterior process is also more robust and its base more obliquely raised.

Long. 7 ; exp. lat. pronot. proeess. $4 \frac{1}{2} \mathrm{~mm}$.
Hab. Camerouns (Escalera, Brit. Mus.). Uganda Prot., Buamba Forest, Semliki Valley, and Budongo Forest, Unyoro (S. A. Neave).

Ann. © Mag. N. Hist. Ser. S. T'ol. xvii.

## Platybelus flarus.

C'entrotus flaves, Sign. in Thoms. Arch. Ent. ii. p. 339 (1858).
Platybe!ns flatus, Stal, Hem. Afr. iv. p. 96 (1866).
Ophicentrus varipemis, Buckt. Munogr. Membrac. p. 2.j0, pl. lvii. fig. 1 a (190:3).
Hab. Calabar.

## Platybelus insignis, sp. 11.

Head, pronotum, scutellum, body beneath, and legs black; tarsi ochraceous ; tegmin:a pale shining ochraccous, the base and a spot on costal margin beyond midde black, a brownish spot on inner margin near posterior angle; pronotum punctate, the anterior maryin truncate, the lateral processes robust, their apices recurved and subacute, posterior process arehed above scutellmm, where it is robmst and impinging on imer tegminal margin before the posterior angle, and thence attennated and recurved to apex, which passes the posterior angle.

Long., incl. tegm., 5 mm.; exp. lat. pronot. process. $3 \frac{1}{2} \mathrm{~mm}$.
Hab. Near Lake Nyassa (Thehwall, Brit. Mus.).

## Maurya, gen. hov.

Pronotmm very strongly centrally longitudinally ridged, the lateral processes somewhat short, broad, sublaminate, the apical margins oblique, the posterior process impinging on the scutellum and tegmina, laterally broad and sublaminate for abont half its length, where it is convex above and then suddenly attenuated to apex, which passes the posterior angle of the imer tegminal margin ; face moderately globose ; legs simple, not diated; tegmina with four apical cells.

## Murrya gibbosulus.

C'entrotns yilboosulus, Walk. Journ. Lim. Soc. Loud., Zovl. x. p. 187 (186is).
Hab. Macassar (I'alluce).

## Antialcidas, gell. hov.

Pronotum broad, strongly centrally carinate, the posterior process prominently convexly, laminately raised, its margins strongly carinate, the apex shortly acute and not passing the posterior angle of the inner tegminal margin, the lateral angles broad and robust, their apices obliquely truncate,
moderately raised and slightly directed backward, viewed from the front they appear to be obtusely acute ; tegmina more than twice as broad as long, strougly wrinkled, four apical cells, the veins straiglit.

The principal character of this genns is fomed in the convexly laminately raised posterior pronotal process.

## Antialcidas trifoliaceus.

Centrotus trifolieccus, Walk. List IIom., Suppl. p. 163 (18.58).
Hab. North China.

## Pantaleon, gell. nov.

Body somewhat short and broad; pronotum strongly, centrally, longitudinally carinate, the lateral angles upwardly raised, their apices angulate and moderately recurved, on their inner margin before apex a strong obtuse spine someWhat upwardly directed, the posterior process strongly laminately subconvexly raiscl, with the margins robust and thickened, its apex shortly acute and slightly passing the posterior angle of the inner tegminal margin ; tegmina not more than twice as broad as long, apical veins fonr in number, with the veins slighty curved.

Allicd to the preceding genus, Antialcidas, by the laminately raised posterior pronotal process, but differing in the peculiarly bispined lateral pronotal angles, short tegmina, \&e.

## Pantaleon montifer.

C'entrotus montifer, Walk. List Hom. ii. p. 6:0 (1851).

## Hub. Hong Kong.

## Amtrochates, gen. hov.

Head truncately declivons in front, with two strong central rilges, more than twice broader than long ; pronotum with the disk elevated, very strongly centrally longitudinally carinate, the lateral angles short and very robust, upwardly directed, anteriorly coarsely serrate, their apices continued in a slender spine a little directed backwardly, at froutal base before eyes distinctly, obtusely, angularly produced, posterior process very robust, strongly mudulate, well separated from scutellum, near base shortly strongly globose, then nodulate and strongly directed downward, afterward raised, strongly longitudinally globose and with a long, slender, slightly curved, apical spine which distinctly
passes the posterior angle of the inner tegminal margin ; scutellum a little longer than broad, the apex slender and recurved ; tegmina about three times longer than broad, apical cells four, preceded by three subapical cells: legs elonyate.

## Amitrochates grahami, sp. n.

Hear, pronotum, and scutellum shining black, a small greyi.h-white spot at each basal angle of the scutellum, a


Amitrochates grahumi, Dist.
similar spot on each lateral margin of the pronotim, and another spot near insertion of tegmina; legs hlack, tibie and tarsi ochraceons, bases of the tibie black; abdomen more or less greyish white ; tegmina pale hyaline, the basal area black, venation brownish ochraceons, a transverse linear spot at posterior angle of inner tegminal margin, and a marginal costal spot beyond mildle pale brownish ; pronotum thickly, somewhat coarsely punctate, posterior pronotal process with the upper and lower margins irregularly coarsely serrate; other structural characters as in generic diagnosis.

Long., incl. tegm., 5 mm .
Hab. Ashanti ; Obuasi (Dr. W. M. Graham). Gold Coast; Aburi (II. H. Patterson).

## Gemus Tricentrus.

Tricentrus, Stål, Hem. Afr. iv. p. 89 (1866); (Efr. Vet.-Alk. Förh. 1869, p. 283; l. c. 1870, p. 728 ; Dist. Faum. Brit. India, iv. p. 53 (1907).

Otaris, Buckt. Monogr. Membrac. p. 249 (1903).
Tuloipa, Buckt. Trans. Linn. Suc. Lind. ix. p. 334 (1905).

## Tricentrus auritus.

Otaris auritus, Buckt. Monogr. Membrac. p. 249, pl. lix. fig. 1 a (1903); Schmidt, Zool. Anz. xxxviii. 1. 242 (1911).
Hab. Sumatra.

I cannot separate this species (type of the proposed genus Otaris) from the genus Tricentrus. The type of O. auritus is now before me, and I think that Buckton must have originally described from a mutilated specimen and afterwards obtained a perfect example which he marked as type. I am foreed to this opinion, as he writes of the "posterior horn" as "almost obsolete," and, again, "the posterior horn is blunt." The posterior pronotal process is, however, normal, slightly passing the posterior angle of the imer tegminal margin, and its aper is distinctly narrowed and acute. It is, however, a species very broad compared with its length.

Tricentrus busalis.
Centrotus basalis, Walk. List Hom. ii. p. G26 (1851) ; Matsum, Annot. Zool. Japon, riii. p. 19 (1912).
Hab. China; Hong Kong; Japan.
Tricentrus finitimus.
Centrotus finitimus, Walk. List IJom. ii. p. G28 (18:51).
Hab. China; Mong Kong.

## Tricentrus caliyinosus.

Ceutrotus caliginosus, Walk. Journ. Limn. Soc. Lond., Zool. i. p. 9.3 (1857).

Hab. Malacea (A. R. Wrallace) ; Singapore (H. N. Ridley). Siam Malay States; Biserat (Annundule \& RoLinson). Malay Archipelago ; Bali (II. Doherty).

## Tricentrus femoratus.

Centrotus femorutus, Walk. Journ. Lion. Soc. Lond., Zool. x. p. 186 (1848).

Hab. Celebes ; Macassar (A. R. IVallace).
Tricentrus congestus.
Centrotus congestus, Walk. Juurn. Linn. Soc. Lond., Zool. x. p. 187 (1868).

Hab. Sula (A. R. I'allace).

## Genus Sipylus.

Sipylus, Still, Hem. Afr. iv. p. 89 (18fif).

## Sipylus dilatatus.

Centrotus dilatutus, Wralk. List 11 mm . ii. p. 6.30 (18.51).
Sipylus nodipemis, Funkhous. Journ. Ent. \& Zool. (Pomona College, Calif., U.S.A.) vi. p. 7?, fig. 5 (1914).

Hab. Philippine Islands.
Walker described his species as having the "fore wings greyish, ferruginous at the base ; veins ferruginous, nodose," whereas in his type the tegmina are also very distinetly ferruginous on the apical areas, as in Funkhouser's figure.
XXXVII.-On some of the External Structural Characters of the Striped Hyœuи ( Hyæna hyæna) and related Genera and Species. By R. I. Рососк, F.R.S.

Tuns paper is based primarily upon the carcase of a female example of Hyena hyena, from India. which died in the Zoological Society's Gardens in Dec. 1915. Of the other species of Hyienas I have scen no fresh specimens; but in 1908 I made some sketehes of the anal ponch and glands of an example of Proteles cristatus. These 1 take the opportumity of reprodncing. Unfortunately, no notes were made of other external features of this animal.

The Facial Vibrisse and Rhinarium.-The facial vibrisse of Hyrenu hyena, as in all Ælnroid Carnivora, except the Felide *, consist of the normal number of tufts-namely, the mystacial, superciliary, two genals, and the interramal. The latter consists of about four well-developed bristhes, and each of the two genal tufts of approximately the same number. These tufts are set rather elose together near the middle of the cheek, the inferior of the two being above the posterior corner of the month. All the vibrisse may be deseriberl as of medinm length and considerable thickness.

In living examples of the Spotted Hyæna (Crocuta crocula) the corresponding tufts of vibrisse are quite apparent, and on a dried skin of a Proteles from Sonth

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[^0]:    * In this family the interramal tuft is always absent, as I have elsewhere recorded (Г. Z. S. 1914. ii. p. 901).

